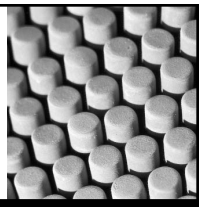
The Tech Bulletin

Monthly Technical News from ENERGY STAR® for buildings



PORTFOLIO MANAGER...
Coming Soon to an Office Near You!

EPA is currently working on the ENERGY STAR portfolio manager, a new Web-based application that will take the place of the current ENERGY STAR label for buildings benchmarking tool. The portfolio manager incorporates many new features, including the tracking of energy use, space use, and upgrade investments for a building or portfolio of buildings over time. The portfolio manager generates summary views and graphics that depict energy, financial, and environmental results for an organization's portfolio of buildings. Users can identify baseline data and set targets in order to track their progress and achievements over time. The portfolio manager continues to provide buildings with a benchmark score that can be used to directly compare the energy efficiency of buildings of varying sizes, locations, and characteristics. Benchmarking is currently only available for office buildings and K-12 schools. Additional space types, including retail and hospitality, are currently under development. Organizations with buildings that receive a score of 75 or higher will be able to use the portfolio manager to apply for the ENERGY STAR label for buildings and submit a case study that highlights their success. All of the existing benchmark data will be available in the portfolio manager and users will be able to use the same login and password. The portfolio manager is expected to make its debut in fall 2000.

UP & COMING "STAR":
Verizon Embraces Benchmarking

Verizon Communications, a leader in the telecommunications industry, is now becoming a leader in ENERGY STAR as well. Verizon, formed by the merger of Bell Atlantic and GTE, is embracing the ENERGY STAR label for buildings benchmarking concept as well as other resources and tools available to ENERGY STAR partners.

With more than 200 ENERGY STAR-labeled office buildings, Verizon has already benchmarked approximately 25 percent of its administrative buildings. Verizon welcomes the many benefits of benchmarking, especially the ability to compare its facilities' energy performance to that of similar buildings around the country. When a facility scores in the top 25 percent, it is recognized as a top performer by receiving the ENERGY STAR label for buildings. More importantly, Verizon is discovering opportunities to capitalize on additional energy and cost savings. As it makes improvements in building performance, Verizon uses new benchmarking scores to measure the company's success across its entire portfolio of facilities.

Verizon views the ENERGY STAR label for buildings as a prestigious award and the company is working toward qualifying more of its buildings to earn the ENERGY STAR label.

"We are thrilled to be an ENERGY STAR partner," says Rod Sluyter, Director of Verizon's energy team. "The ENERGY STAR label for buildings benchmarking tool is helping us identify our worst energy use administrative buildings so we can attack those first. Not only does the tool help Verizon achieve its goal of using the least amount of energy necessary, it can help other companies as well. With the help of ENERGY STAR, Verizon is able to make even more of an impact on pollution reduction as well as financial responsibility."

Verizon is looking to incorporate ENERGY STAR into its already progressive energy management strategies. Verizon's Energy Board of Directors meets quarterly to address energy issues with a variety of representatives from many sides of energy issues, including financial, environmental, sup-

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Web Site Information

ENERGY STAR®
www.epa.gov/buildings

ENERGY STAR
label for buildings
www.epa.gov/buildings/label

Energy Services and Products (ESAP) Directory
www.epa.gov/asap

Do you have an energy-efficiency success story you'd like to share?

The *Tech Bulletin* is your newsletter. We want to help you get the right information so you can make well-informed decisions about your energy-efficiency upgrades. Many *Bulletin* readers have requested that we feature more case studies.

If you would like to see your building, company or organization featured in an upcoming *Bulletin* case study, contact your account manager or send an email to bulletin@icfconsulting.com.

Bulletin E-mail Reminder

Sign up to receive monthly *Bulletin* reminders. Send your email address to: bulletin@icfconsulting.com

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ply, facilities, communications, operations and management, and others. Verizon is also diligently tracking their energy data with the assistance of Florida Power & Light's EDM Pro.com.

Verizon is committed to helping preserve a healthy environment. By benchmarking its buildings, Verizon is raising internal awareness of energy performance and spurring competition between facilities. Ultimately, Verizon's participation in ENERGY STAR will lead to lower operating costs and better financial performance for the company.

YOUR SCORE IS ONLY AS GOOD AS THE INFORMATION YOU INPUT:
Ten Tips for an Accurate Benchmarking Score

The ENERGY STAR label for buildings online tool for benchmarking evaluates a building's energy performance on a zero to 100 percentage scale using detailed data on your building's physical attributes, operating characteristics, and monthly energy consumption. Buildings that score 75 percent or higher and maintain a healthy indoor environment consistent with industry standards qualify for the ENERGY STAR label for buildings.

Of course, your score is only as good as the information you input. So, here are our Top Ten Tips for improving the accuracy of your building's benchmarking score:

1 ***Energy Consumption Data.*** Make sure you have one year's worth of monthly energy consumption data for all kinds of energy used by the building. If the building uses natural gas, propane, steam, oil, or chilled water make sure you have a record of that consumption data. If you work for a large organization and the energy engineers do not currently track that information, see if the accounts payable department keeps a photocopy of actual utility bills. If you cannot find your energy consumption data anywhere in the company, contact your utility directly — they should be able to provide the data you need.

2 ***Monthly Billing Dates vs. Actual Energy Consumption.*** The benchmarking software will weather-normalize your energy consumption data, based on actual day-by-day weather for your local area. To ensure the accuracy of these adjustments, it is extremely important to enter the actual dates covered by each month's energy consumption data. For example, your utility bill for January may cover the period from December 23 through January 23. If this is the case, then you should log your energy consumption data according to these dates, not January 1 through January 31. If the dates you enter do not exactly match the dates of the actual energy consumption, your weather-based adjustment will not be accurate.

3 ***Building Location.*** An accurate building location is also critical for an accurate weather normalization. The building's zip code is used to pull up relevant weather data — so when you enter a building's location, be sure to use the five-digit zip code of the building itself; not your mailing address or the main company headquarters (unless that is the building you are benchmarking).

4 ***Non-Modeled Space Types.*** At present, the tool for benchmarking is only equipped to deal with office and K-12 school space. Our development staff is working hard to expand benchmarking capabilities to include additional space types. In the

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EPA Welcomes the Following New ENERGY STAR partners

Hollywood Entertainment Corporation
Navistar International Transportation Co., Fort Meyer Operations
Shaw Industries
Saint Joseph's Medical Center
DiaSorin
Beachside Resort and Conference Center
Manhattan East Suite Hotels
MetLife
Granite Properties
Raytheon Company
Time Warner
Mercedes-Benz U.S. International, Inc.
Meadville Medical Center
Our Lady of Consolation
Montgomery General Hospital

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meantime, however, you should only log data for building space that fits into the office or K-12 space categories. For example, if your office building includes a fitness center, retail shop, restaurant, or cafeteria, do not include energy consumption data (or square footage) for these spaces in your total. Even small cafeterias can consume $500 or more of electricity per day, so your score could be significantly reduced if this energy use is included in your total. Spaces of this type should be sub-metered, so you can easily subtract out that energy. (If not, you may want to consider implementing sub-metering as an energy management tool.)

5 ***Computer Data Centers.*** The tool for benchmarking does include algorithms for computer data centers, but the square footage of this space must be accurately entered. The formal definition of this space type is "an area that is specifically designed and equipped to meet the needs of data storage or computer equipment for controlled temperatures and/or humidity." Typically, the air-conditioning system for this type of space is separate from the main building air conditioning, and the space will be self-contained to avoid open airflow to and from other parts of the building.

6 ***Parking Space.*** If your parking space is sub-metered, do not include that energy use or square footage with your building data. (The only exception is if you have an enclosed parking garage that shares a common wall with your building — then you should include it.) If you choose to include energy use and square footage of a parking area, you should be able to categorize the parking area as (1) ventilated, (2) enclosed but not ventilated, or (3) open parking (not ventilated or enclosed). If your parking space is enclosed and/or ventilated, you will also need to specify whether it is attached to the building. Attached garages share a common wall with the building; unattached garages either don't connect to the main building, or are connected by an enclosed walkway or bridge.

7 ***Number of Occupants.*** The number of building occupants should represent, as closely as possible, the total number of people working in the building during the main shift on a typical workday. Do not include office visitors even if they are regularly present — for example, customers, patients, or students. Also, do not count workers who work outside the building but report in periodically, such as field salespeople, delivery people with routes, or messengers. If you need to estimate the number of building occupants, the national average occupant density for office buildings is 2.5 people per 1000 square feet.

8 ***Weekly Hours.*** Weekly hours should reflect the number of hours per week that a building is used, excluding hours when the building is occupied only by maintenance, security, or other support personnel. For buildings with a schedule that varies during the year, "weekly operating hours" refers to the total weekly hours for the schedule most often followed. The national average is 65 hours per week; avoid going any lower than 30 or higher than 168 hours per week.

9 ***Number of Personal Computers.*** This figure should represent the number of self-contained personal computers in the building. It should not include individual mainframe terminals. You can estimate this number based on the national average of 0.9 to 1.0 computers per occupant. However, your score will be more accurate if you can get an actual count.

10 ***Call for Professional Support.*** If you are an ENERGY STAR partner or energy service provider, contact a partnership representative directly for one-on-one support. Or, email energystarbuildings@epa.gov with any questions you may have and a representative will get back to you.

The benchmarking process does ask you to consider many variables, but they all contribute to the accuracy of your score. Realize that few buildings receive their best and final benchmark scores on the first try. The best approach is to enter as much data as possible in the beginning, then fine-tune your entries to improve the accuracy of your score. If you are crunched for time, researching the right data can be a great assignment for an intern or new employee.

And remember to save your data and your score over time. As you invest in energy-efficient upgrades, you can watch your score improve and share those results with your managers, employees, and customers.

Ask the Energy Expert

Have a Question? Get your maintenance, financing, communications, and partnership questions answered by sending an email to Jude Rutkowski, bulletin editor, at Rutkowski.Jude@epamail.epa.gov